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The Australian Rangeland Society

ENHANCING CONSERVATION VALUES: A VISION FOR THE FUTURE

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ABSTRACT

The need to improve the conservation status of Australian agricultural and pastoral land is one of the most compelling challenges for Australia in the 1990s.

It is time to start managing this country as if we intend to stay, rather than as if we are just passing through, or as if it is a business in liquidation. The solutions of the past are not the solutions for the future. We must make use of our unique natural heritage, our plants and animals, linking natural resource management and ecology to invest in natural capital, especially in the rangelands. Conservation of our environment — our species and ecosystems and the processes they support; the water levels and quality of our rivers, wetlands and groundwater resources; soil structures and landscape features — is crucial to the sustainability of all the industries based in the rangelands.

Conservation is an investment in natural capital. It is not an alternative land use nor an opportunity cost, it is the fundamental protection of the natural resources which underwrite . our material wealth. This vision should inform our management of the rangelands, today and in the future.

INTRODUCTION

The real underlying material wealth of Australia, its natural resources, has been depreciating. But this depreciation has not been reflected on our national balance sheet. We have been living off natural capital and not making the necessary investments to maintain our natural resources.

All over the world, governments and rural communities are grappling with a similar suite of problems. Farm terms of trade are declining; commodity prices fluctuate, but the long-term trend is downwards; smaller, family properties are seeking off-farm income, diversifying or going broke; people are moving from the country to cities, especially the young in search of jobs; and natural resources are under increasing pressure.

The contrast between Australia and other developed nations in terms of the richness and biological diversity of our natural landscapes is stark. Australia is one of very few countries in a position to define pathways to more sustainable management of natural resources. Of the twelve nations with the greatest biodiversity, Australia is the only member of the OECD. We still have options. We are a small young nation in a vast ancient continent, with a stable political climate, low population pressure, a well-educated workforce and a highly developed technological capacity.

The challenge for our rangeland managers and their supporting industry is to fully embrace the concept of sustainability and to make it work, to give it meaning. Environmental standards and non-tariff barriers will have increasing impacts on international trade in an era of mobile capital, global markets, global communications and global perceptions. Quality assurance and production targeted to specific markets are increasingly important for enterprise viability. We must understand and celebrate the unique ecology of Australia to better manage the rangelands and target profitable markets.

The recently released draft National Strategy for Rangeland Management puts us on a path of change (ANZECC and ARMCANZ Working Group 1996). We must take this opportunity to seek the

participation of all Australians to develop the broad Strategy into an Action Plan that assigns responsibilities and apportions costs. That Action Plan has to be founded on a vision for a sustainable future — ecologically and economically.

THE VISION

We keep hearing that it is hard to be green unless you're in the black. On the contrary, rural Australia will not remain in the black unless it is green. That is, unless we manage our land in a 'clean and green' manner, not just by talking about it but by meaning it and doing it — by understanding Australia's ecology and conserving our land and water along with the animals and plants that live there — we will not maintain commercial viability.

For Australia's rangelands to have a robust future we must integrate productive uses (among which I include pastoralism, ecotourism, mining, defence and the myriad of developing industries such as harvesting of native flora and fauna) and ecological management; that is, we must capture the lofty and flighty halcyon which is ecologically sustainable development.

There are two aspects to this integration:

- 1. Australia's rangeland managers and policy makers must understand and work with the natural ecological processes and systems of Australia, not ignore them, fight against them or try to displace them with systems borrowed from elsewhere (Foran *et al.* 1989).
- 2. Australia's ecological uniqueness is a source of comparative and competitive advantage in global markets. We should be looking starting in the most marginal country to manage the plants and animals which are naturally adapted to this country, rather than those which can be grown more efficiently elsewhere, and which struggle in our variable climates and tough landscapes.

We need to better promote environmentally responsible management, to invest in improving management skills and to support ways of incorporating environmental costs into production and prices. Nature conservation is an investment in natural capital. It is not an alternative land use nor an opportunity cost, it is the fundamental protection of the natural resources which underwrite our material wealth.

NATURE CONSERVATION --- MANAGING THE ECOLOGY

The viability of pastoral activity in the rangelands depends crucially on the quality of management of essentially natural systems. Good management is based as much upon ecological understanding and monitoring, as upon the needs and aspirations of pastoralists and the context set by markets and government policies.

An ecological approach to rangeland management means understanding and working with the uncertainties of climate, using fire as a management tool, manipulating total grazing pressure, managing invasive species and protecting those special areas on productive land which provide ecological services — areas such as critical habitats provided by waterholes, mound springs and patches where fertility is greater, such as in depressions and around trees; these should be conserved within the productive matrix.

We must use this opportunity provided by the development of the National Strategy for Rangeland Management and its Action Plan to significantly raise the standard, from a nature conservation perspective, of natural resource management in the 95% of the Australian landscape which is outside reserves. We must focus at a more detailed level on tasks which are geographically specific, costed, and prioritised in the Action Plan for the Rangeland Strategy.

21

Both the National Strategy for the Conservation of Australia's Biological Diversity and the draft National Strategy for Rangeland Management provide the framework strategies for biodiversity conservation in the rangelands. But, given our extraordinary biological diversity, huge land mass and low population density, we simply cannot put every ecosystem, every species and every genetic form into secured single-purpose reserves managed by Government agencies.

Similarly it is non-sensical to imagine that if all rangelands managers walked off the land tomorrow, nature will look after the values we seek to conserve. We must actively manage our natural resources to protect them from the ravages of regional hydrological imbalances (George *et al.* 1995) and invasive species and to continue the patterns of human intervention such as fire, which have formed Australian ecosystems over the past 40,000 years.

The vision of enhancing nature conservation through ecological management of production activities is consistent with the goal of achieving ecologically sustainable development. This is quite different to the subordinate concept of multiple and sequential land use, which in this environment would tend to depreciate natural capital and close off options for higher-value uses of the land. Multiple use may be appropriate in some areas where the public good values can also be maintained sustainably.

NATURE CONSERVATION — MANAGING THE ECONOMY

The industrial and mining sectors have been taking up the challenge to improve their environmental performance. They do so not because they are born-again greenies or cash-rich philanthropists, but because it makes sense, it saves money and it gives a leading edge in the market place. Similarly, it is time for our land managers to understand that protecting species and landscapes is an investment in the natural capital which supports productive activity. We must sharpen our competitive advantage on world markets. The clearest advantage we have is our sheer uniqueness and novelty.

Australia has literally thousands of species of animals and plants which grow nowhere else, yet we persist in trying to flog the same products as everyone else, grown in climates and landscapes for which they are ill-adapted. I am not arguing for the wholesale exploitation of native species, but I think we do need a fresh look at the long-term sustainability of many of our conventional enterprises, in a way which ignores the massive inertia and vested interests of the status quo.

To achieve ecological sustainability and maintain commercial viability in the rangelands we will have to develop alternative economies. We also need to think beyond the assumption that you make money out of natural resources by digging them up, cutting them down, or shooting them, then sending them overseas. This colonial mindset continues to constrain our thinking about how to make money from the rangelands in sustainable ways. Take tourism. The draft Rangeland Strategy indicates that tourism is already a bigger rangelands earner than wool and beef combined, and that is without counting continuing land degradation on the negative side of the national balance sheet (ANZECC and ARMCANZ Working Group 1996). Yet how much of this money benefits the people who live in the rangelands? How have we re-configured rangeland enterprises to achieve synergies between tourism and other uses? Tourism in the rangelands appears to have grown despite the existing land uses and in an ad hoc, ill-focussed, totally unstrategic manner. This may not have mattered as much on a small scale, but it surely will over the long term if present trends continue. We need to take stock if we are to ensure that nature conservation, tourism and primary industries are complementary activities in the rangelands.

We must change the goals of rangeland management from one of exploitation to celebration of the 'Natural Country' (Campbell 1996). We need to learn how to better manage invasive plant and animal species, introduce ecologically-informed fire management regimes and manage the water resources which support rangeland life and provide critical habitat - the surface waters, groundwaters, isolated waterholes and whole basins such as the Cooper. We should be focussing on developing truly Australian land use systems and products, including non-extractive services such as ecological or

cultural education and experience. We should aim to produce higher value-added commodities which other markets cannot produce - pharmaceuticals, essential oils, unique food and fibre from roos and emus, and so on. We have much to learn from indigenous land management, which is not to say that we cannot be doing more to work with Aboriginal communities to improve management of their lands, especially on properties with a long history of degradation under former land uses.

To realise our vision — to make the rangelands commercially viable and ecologically sustainable — we must create a competitive advantage for Australia on world markets with natural products, produced in a genuinely 'clean and green' way.

MAKING THE CHANGE — IMPLEMENTING THE VISION

We must now develop an Action Plan to implement the Rangeland Strategy. It must be fully costed, with geographically specific tasks and with responsibilities assigned; not only to Commonwealth or State Governments, or to pastoralists, not only to the community groups, nor the other industries which rely upon the natural resources of the Australian rangelands, but to each of these groups in partnerships. The change process must be planned on a bioregional basis, supported, monitored and amended by all of these groups.

At the Commonwealth level, the Natural Heritage Trust programs, such as the National Vegetation Initiative (NVI), will enable a range of measures to enhance nature conservation in the rangelands. But we have to be strategic in how we target and spend these monies. The debate must not degenerate into arguments over compensation, or the available funding will be quickly spent and we will confront major equity issues between States and between regions. We want healthy landscapes, not just a few green islands in a sea of on-going degradation, which is a kind of ecological apartheid.

The management of this change will be extremely challenging. It will require a full range of policy instruments, and a preparedness to think beyond current conventions. Sustainable land management in regions as complex as the Australian rangelands will require a high level of sophistication and professionalism on the part of its practitioners. Donald McGauchie, President of the National Farmers Federation, is keen to see a National Accreditation Scheme encompassing farm planning and ecologically sustainable development (McGauchie 1996). We also have to consider the use of incentives, persuasion, fiscal policies, extension services and disincentives.

CONCLUSION

This paper delivers a vision for enhancing nature conservation in the Australian rangelands. But this vision is broader than an isolated policy for nature conservation. It sees an ecological basis for natural resources management and for using Australia's extraordinary natural cornucopia to develop new markets, in Australia and abroad, and to ensure the commercial viability of Australian rangelands. To achieve these integrated and mutually supportive goals, Australia's rangeland managers, users and policy makers will have to significantly improve the conservation performance of rangeland management throughout the remainder of the 1990s and beyond.

REFERENCES

Australian and New Zealand Environment and Conservation Council (ANZECC) and Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) Joint Working Group (1996). Australia's draft National Strategy for Rangeland Management. Department of Environment, Sport and Territories, Canberra, Australia.

Campbell, A. (1996). Pixels in the big picture: Farm plans, rural landscapes and livelihood. Centre for Resource and Environmental Studies Working Paper 1996/2. Australian National University, Canberra, Australia.

³oran, B.D., Friedel, M.H., MacLeod, N.D., Stafford Smith, D.M. and Wilson, A.D. (1989). Policy proposals for the future of Australia's rangelands. CSIRO Australia.

George, R.J., McFarlane, D.J. and Speed, R.J. (1995). The consequences of a changing hydrologic invironment for native vegetation in southwestern Australia. *In* 'Nature Conservation 4: The Role of Networks'. (Eds D.A. Saunders, J.L. Craig and E.M. Mattiske). Surrey Beatty and Sons, Chipping Norton, NSW. pp. 9-22.

McGauchie, D. (1996). The future of agricultural land use in Australia. Presentation given to Waite Agricultural Research Institute, Adelaide, 26 March 1996. National Farmers Federation, Canberra, Australia.